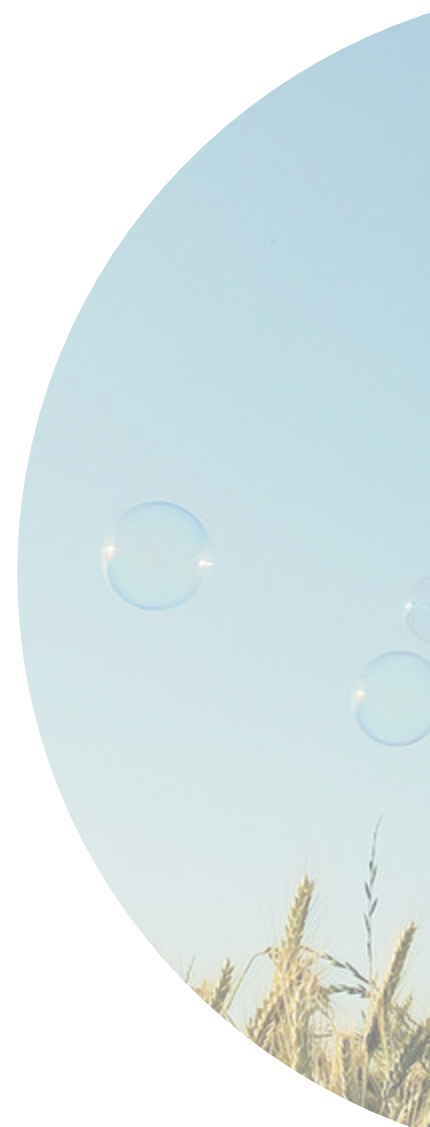


ACTIVITY REPORT 2013







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**European Association
for Storage of Energy**

THE EUROPEAN ASSOCIATION FOR STORAGE OF ENERGY...

... is the **voice of the Energy Storage community**, actively promoting Energy Storage in Europe and worldwide

... actively supports the deployment of Energy Storage as an indispensable instrument within the framework of the European energy and climate policy to **deliver services to**, and **improve the flexibility of, the European energy system**

... contributes to building a European platform for **sharing and disseminating** Energy Storage-related information

... supports the transition towards a **sustainable, flexible and reliable energy system** in Europe





“By building up a more flexible energy system it will be easier for the European Union to introduce renewables, accelerate the decarbonisation of the electricity supply and improve the efficiency of electricity transmission and distribution.”

2014 marks the start of Horizon 2020, the EU's biggest research and innovation programme to date with nearly €80 billion of funding available over the next seven years.

In line with the Europe 2020 strategy for smart, sustainable and inclusive growth, Horizon 2020 is a next-generation research and innovation programme designed to deliver results for our citizens, help innovative businesses prosper and support our economies. With its three main aims - to support excellent science, to foster industrial leadership and to tackle our big societal challenges - it

promises more breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market.

With Horizon 2020 the EU has targeted investment in research and innovation that can have a real impact benefitting the citizen. Energy is one of the grand challenges we need to tackle with a common effort: we need energy to extract and

process raw materials; we need energy to transform them into manufactured good and products; we need energy to transport these products to the customer - and the customer needs energy for her/his daily life.

The need to ensure secure, affordable, clean and sustainable energy supplies is therefore one of the seven societal challenges of Horizon 2020 and a top political priority for Europe's leaders. Indeed, on 22 January the Commission set out its 2030 climate and energy goals for a competitive, secure and low-carbon EU economy. Horizon 2020 will play a pivotal role in achieving these goals and the recently launched calls for proposals are in full alignment with them. The Strategic Energy Technologies (SET) Plan remains the central pillar of coordination of research and innovation actions between Member States, Horizon 2020 and the Euratom framework programme for nuclear research which together are expected to substantially leverage investment in this area.

Innovations in the field of energy sources and their integration into the energy sys-





tem are playing a fundamental role in the environmental, energy and sustainability policies. Europe is already among the world leaders in the deployment of renewables, but that is not enough. We need to develop renewables and maintain the high quality of our electricity supply, which is first class in the world. In this context, Energy Storage can make a key contribution in enabling the EU to develop a low-carbon electricity system while maintaining the high standard of reliability. Energy Storage can be one of the sources of flexibility that can locally improve the management of distribution networks, reducing costs and improving efficiency.

The importance of flexibility and Energy Storage can clearly be seen in the funding priorities: from €52 million in the seven year programming period of the Seventh Framework Programme for Research and Technological Development to €70 million just for the first two years of Horizon 2020. In this context three calls for proposals have been included in the

2014-2015 Work Programme to cover small and large scale Energy Storage and the development of the next generation technologies for Energy Storage. By

“Energy Storage can be one of the sources of flexibility that can locally improve the management of distribution networks, reducing costs and improving efficiency.”

building up a more flexible energy system it will be easier for the European Union to introduce renewables, accelerate the decarbonisation of the electricity supply and improve the efficiency of electricity transmission and distribution.

From the beginning of my mandate I was adamant that our scientists and entrepreneurs must have easier access EU research funding and less red tape, and with Horizon 2020 I believe that we have achieved this. We count on Europe’s scientists to produce the excellent research needed to tackle the major societal chal-

lenges and underpin innovation, so why put extra barriers in the way? Similarly, Horizon 2020’s business-friendly and radically simplified rules and procedures will help more private enterprises realise their full potential and become market leaders. In this context, the new programme foresees funding for the pre-competitive stages, a measure aimed at innovation.

I am convinced that EASE will play an important facilitating role in mobilising its members to rise to one of the biggest challenges the European Union will need to face in the following decades. By working together and sharing knowledge we can make Europe’s energy system fit for generations to come.

Máire Geoghegan-Quinn



“Now that policy has shown the way for the energy revolution, it is time for the private sector to take up the torch and see the change through.”



The way we generate, manage and use energy has been shifting fundamentally in recent years and so has the energy sector. Energy Storage accompanied these transformations and supported the prospect of a more flexible, efficient, and low carbon energy system.

Europe has been a pioneer in reinventing the energy sector. All over the continent more environmental friendly ways to generate energy have been slowly asserting their presence in the energy mix. But changes always come with a price; new limitations and difficulties are to be dealt with in the new energy system.

First of all, the newly introduced technologies come with their own specificities. The power produced by renewable sources is often variable. Their generation is also more likely to be spread out over larger areas where the required connection to the main grid does not necessarily exist. These characteristics have to be considered and have to be reflected in the new structure of the energy system. In the recent years we have witnessed a strong

prioritisation to innovate our power generation. This asymmetric development needs to be compensated for, in order to successfully keep pushing the implementation of the energy revolution.

This brings me to a second challenge. Like any change, the reinvention of the energy sector has to be driven. To this stage, the energy change was mainly the prerogative of politics through the usage of support schemes and regulation. This strategy was successful in triggering creativity at an early stage and in backing businesses who take risks by exploring new ways to look at power generation. Unfortunately, this effect is increasingly fading, with subsidies turning from the means to an end, to the end in themselves. At the same time, the public is becoming increasingly aware of the growing energy bills for households and businesses.

Now that policy has shown the way for the energy revolution, it is time for the private sector to take up the torch and see the change through. The large variety of potential Energy Storage based solutions to

address the limitation of the new energy system leave no doubt that Energy Storage is one of the keys to a future flexible energy system. But more research is needed to explore the full potential that Energy Storage can play in the way we deal with energy in an effective and flexible way in the interest of all stakeholders.

Bernard Delpech

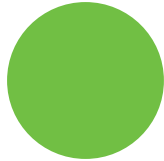
Patterns of energy supply and consumption are changing rapidly. The main factors of this evolution are a fast increasing rise of intermittent or variable renewable energy sources and distributed generation, changing market regulations and stringent environmental targets. Given this scenario there is a considerable pressure on stakeholders to evolve in order to meet these new demands.

Energy Storage can deliver a number of strategic services both on the regulated and deregulated side of the power business, addressing five major challenges:

1. balancing demand & supply
2. managing transmission & distribution grids
3. ensuring energy efficiency
4. promoting demand side management
5. contributing to a competitive & secure electricity supply

Energy Storage devices are 'charged' when they absorb energy, either directly from renewable generation devices or indirectly from the electricity grid. They 'discharge' when they deliver the stored energy back into the grid. Charge and discharge normally require power conversion devices, to transform electrical energy (AC¹ or DC²) into a different form of chemical, electrical, electrochemical, mechanical or thermal form of energy.

There exist numerous storage solutions, which reflect the different technical requirements depending on whether a larger number of small, local storage facilities or a smaller number of large, central facilities are to be used.



The two main parameters to differentiate Energy Storage solutions are:

- Power: can reach from a few W up to hundreds of MW for centralised bulk Energy Storage devices
- Time: storage may perform charge or discharge functions over milliseconds, a few seconds or minutes (e.g. for grid services like frequency stabilisation), minutes to a few hours (smoothing or time shift of renewable generation), up to days and weeks (balancing long term fluctuations in generation and consumption)

Multiplying power by time delivers the capacity or energy content of the storage device.

1. AC - Alternate Current
2. DC - Direct Current



Lithium-Ion - Battery systems Saft



Na-NiCl₂ Battery Systems
Fiamm ESS

Quotes from EASE Members
 "Storage is one of the key enablers for Europe's 20-20-20 targets"

Home Storage System
RWE



Quotes from EASE Members
 "Storage, in all its forms, is vital to integrating intermittent sources of renewable energy into the European energy system. EASE ensures that EU policy makers have the necessary knowledge and background on all Energy Storage options to make informed decisions."

Variable Speed Pumped Hydro Storage power plant
Alstom



Smart Electric Thermal Storage System
'Quantum' space and water heating system
Glen Dimplex





Over 2013, discussions on EU energy policy have increasingly focused on the “after 2020” time period, with policy-makers looking ahead to 2030 or even 2050. What is your vision for Europe’s energy system in 2030? And what do you think needs to be done to get there?

We believe that for the energy sector long-term thinking and stable investment conditions are essential. This has been the main aim for the Commission’s EU Energy Roadmap 2050 and the recent 2030 energy and climate policy framework. We are convinced that the EU can become the champion of low-carbon economies while further developing its competitiveness, building on the successes of the 20-20-20 strategy, but adapting it to the changes since 2007. A reduction in greenhouse gas emissions by 40% below the 1990 level, an EU-wide binding target for renewable energy of at least 27% and renewed ambitions for energy efficiency policies are the pillars of the new EU framework on climate and energy for 2030. This also implies important transformations in the EU energy sector:

we need to complete the Internal Energy Market, we need to improve competition in the market (particularly at the retail level), we need to improve the level of interconnections in the EU, make the most of our indigenous sources... all this will help us decarbonise our economy while keep-

“The key question will be how to integrate large amounts of Energy Storage into the electricity system so that the curtailment of renewables can be minimised while at the same time reducing the energy costs for the consumers.”

ing energy prices on check and creating growth and jobs. This is why the 2030 framework we propose also identifies a number of energy indicators that will need to be closely monitored over time to assess our progress in these areas.

What role does the European Commission think Energy Storage can play in meeting the targets agreed for greenhouse gas emission reduction for do-

mestic EU emissions and for the share of renewable energy in the EU?

Energy Storage can play an important role in increasing the maximum share of variable renewables (such as Wind and Photovoltaics) while ensuring the stability and the security of our electricity system.

Energy Storage can also play an important role in reducing the need to curtail intermittent renewables.

The key question will be how to integrate large amounts of Energy Storage into the electricity system so that the curtailment of renewables can be minimised

while at the same time reducing the energy costs for the consumers.

Renewable Energy Sources integration - above a certain threshold - implies a paradigm shift in the way energy markets and grids are organised. Most of the existing regulation was created with a centralised power generation system in mind. Do you believe that this regulation needs to evolve in order to allow new grid



EASE STRUCTURE



The General Assembly, composed of all EASE Members, is the supreme authority of the association. It appoints the Members of the Executive Board, which implements the adopted policy and work programme. The Committees are working bodies, established to reply to the association's defined work programme.

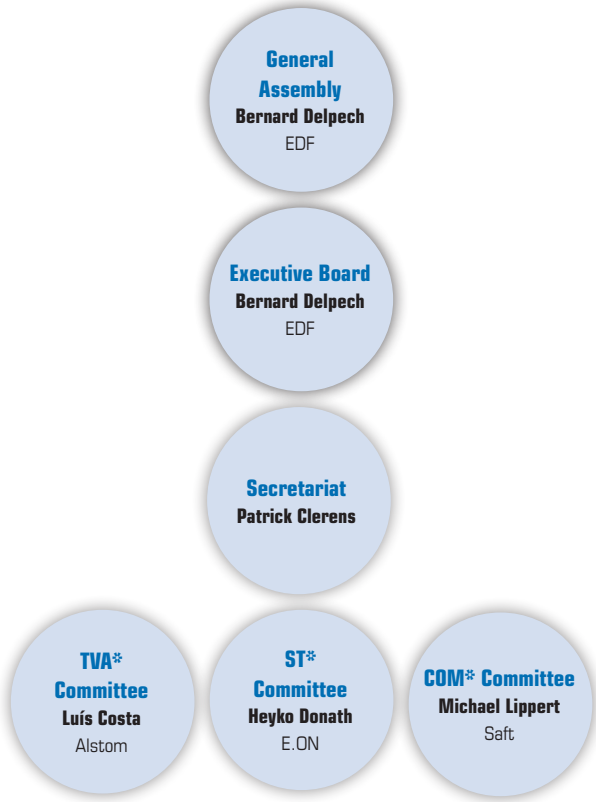
EASE's President oversees the implementation of the decisions taken by the General Assembly and Executive Board and strives for the increased impact of the association. He is assisted in his responsibilities by the Vice-Presidents.

The EASE Secretariat, based in Brussels, is in charge of the daily work of the association and maintains its internal and external relations.

Elected Positions



Organisation Chart



*TVA : Technology and Value Assessment
ST : Strategy
COM : Communications

6th Meeting of the Executive Board in March 2013





The Founding

On the 27th September 2011, a group of Europe’s leading players in the energy sector, including manufacturers, utilities, grid operators (TSOs and DSOs), consultancies and academic bodies, came together in Brussels to sign the formal constitution for the creation of the European Association for Storage of Energy (EASE). This international non-profit association is focused on acting as a coherent voice to promote the roles of Energy Storage as key enabling technologies for Europe’s transition towards a sustainable, flexible and stable energy system.

The 13 founding members of EASE are Alstom, DONG Energy, E.ON, EDF, EnBW, Enel, GDF Suez, Hitachi Power Europe¹, KEMA², RISOE³, RWE, Saft and Siemens.

The following members have joined EASE since October 2011: ABB, BASF, Bosch, CENER, CIRCE, DEME Blue Energy, Elia, FIAMM, Fraunhofer UMSICHT, Gaelectric, Gas Natural Fenosa, GE Energy Storage,

GL Garrad Hassan², Glen Dimplex, High-view Power Storage, Hydrogenics, IK4-CI-DETEC, Isentropic, Kolibri Power Systems, Maxwell Technologies, Panasonic, Saint-Gobain, TDK Europe, Tecnalia and Terna.

The Reorganisation

In 2013, EASE underwent a drastic change with the restructuring of its committees. Where before, there was a *Technology and Strategy* Committee, there is now the Strategy Committee on the one hand, and the Technology and Value Assessment Committee on the other, to better represent the needs and tasks of the association.

This restructuring went hand in hand with a reorganisation of the Working Groups and Task Forces of the respective committees.

The committees met for the first time under the new structure during the Committee meetings of October 2013. It was during these meetings and in the following months that the new and the old com-

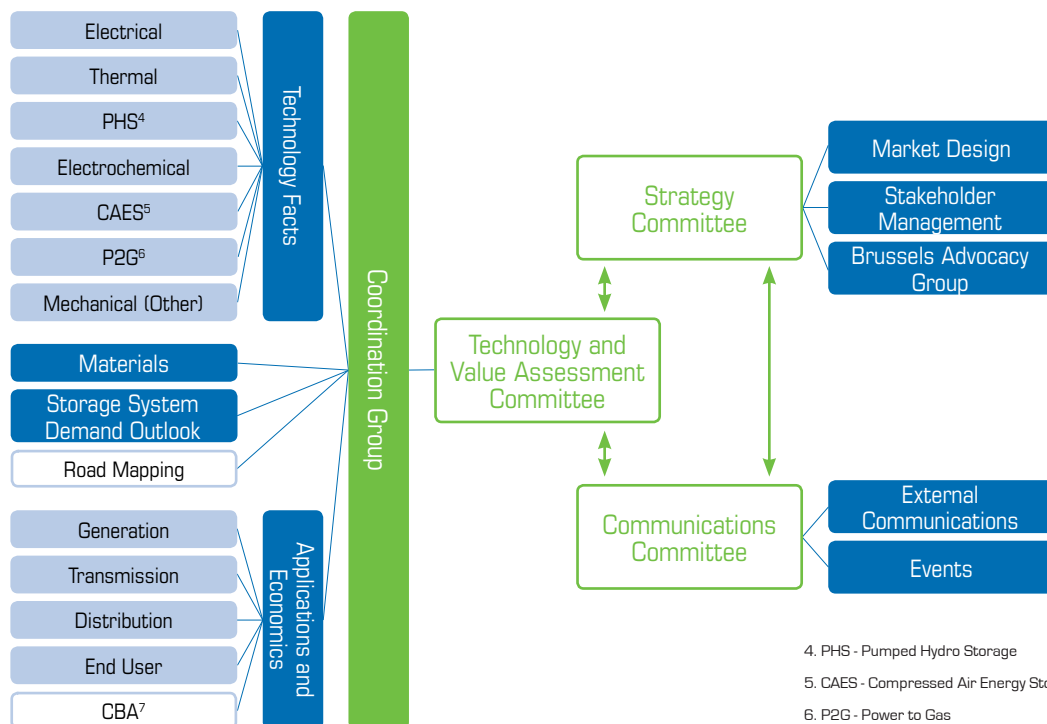
mittees established a new mission statement, clearly defining the objectives and synergies within EASE.

The Election

Together with the reorganisation of the Committees, EASE had its first Executive Board election in 2013.

In December 2013, the members of the General Assembly came together to vote upon half of 14 positions – the remaining to be put up for election in 2014 to ensure the continuity of the work. The voices of transmission service operators Elia (Belgium) and Terna (Italy), and of technology supplier FIAMM (Italy) joined those of Alstom, DNV GL, DTU, E.ON, EDF, Enel, Gaelectric, GDF Suez, MHPSE¹, RWE and Saft, guaranteeing an even representation of the Energy Storage value chain.

1. Now Mitsubishi Hitachi Power Systems Europe (MHPSE)
 2. Now DNV GL
 3. Now DTU



Structure in December 2013

4. PHS - Pumped Hydro Storage
 5. CAES - Compressed Air Energy Storage
 6. P2G - Power to Gas
 7. CBA - Cost Benefit Analysis





The existing Technology and Strategy Committee was split up in 2013 into a Technology and Value Assessment Committee and a Strategy Committee. This restructuring went hand in hand with the retirement/creation of several Working Groups and Task Forces – and a Coordination Group to ensure a proper coordination between both – and the definition of their missions and their rules, both for the newly founded committees and the existing Communications Committee. Together, they work towards to accomplishment of the goals of EASE, namely to



- be the voice of the Energy Storage community, actively promoting the use of Energy Storage in Europe and worldwide.
- actively support the deployment of Energy Storage as an indispensable instrument within the framework of the European energy and climate policy to deliver services to, and improve the flexibility of, the European energy system.
- build a European platform for sharing and disseminating Energy Storage-related information.
- support the transition towards a sustainable, flexible and stable energy system in Europe.

Through their participation in committees, EASE members get involved in the relevant work areas of the association and contribute to shape the organisation's expertise and positions.

Technology and Value Assessment Committee - TVAC

Created in 2013 as one of the successors of the Technology and Strategy Committee, the TVAC is the main responsible for acquiring and delivering hard data.

A good example of this is the compilation – part creation, part assembly – of the Technology Descriptions. The TVAC has a Working Group specifically dedicated to **Technology Facts**, which contains several Task Forces dedicated to specific Energy Storage technologies. These Task Forces are, amongst others, responsible for the compilation of their Technology Descriptions and the RD&D needs for that specific technology¹.

The value of Energy Storage lies with the different system services and their combination. A second TVAC Working Group takes care of the Energy Storage **Applications and Economics**, assisted by Task Forces covering the entire value chain, from Generation to End User. This Working Group aims to demonstrate the economic viability of Energy Storage and to identify any shortcomings hampering it.



Combining these two sides of the same coin, the TVAC also strives to get a better grasp on the linkages between the different technologies and the system costs and to develop the next steps necessary for the technologies' market uptake.

Logically following from this the TVAC is also one of the responsible for the creation of Energy Storage **Roadmaps** – like the 2030 Roadmap published in 2013 – and for all other technology related questions and requirements, both internal and external. Lastly, the TVAC has a dedicated Working Group to assess the **demands and trends of Energy Storage** through literature perusal and to make sure that EASE is aware of any interesting developments.

1 RD&D - Research, Development and Demonstration





Strategy Committee - STC

Like the TVAC, the STC was created by the splitting up of the Technology and Strategy Committee. As its name indicates, the committee is dedicated to developing and executing a medium and long-term vision, outlook and perspectives on the development of Energy Storage and its industry in Europe. To do this, the STC closely follows up any EU policy that could be relevant for Energy Storage, and keeps a close eye on the impact of existing – and future – legislation.

Two important groups of the STC are the [Stakeholder Management Group](#) and its complementary [Brussels Advocacy Group](#). The former is focussed on identifying priorities and elaborate strategies for EASE engagement, the latter coordinates the actions of EASE members, both internally and towards achieving the EASE objectives. Other topics of interest of the STC are, amongst others, the definition and promotion of a fair market design for all services and the promotion of a policy and regulatory business framework conducive to the necessary investments for a growing storage market. The question of market design, specifically, is more extensively dealt with by the [Working Group on Market Design](#). The work of this last group includes, amongst others, the 7 High Level Recommendation published in the 2030 Roadmap.



The STC of course also acts as an advisory body to the other committees and EASE bodies on Policy/Strategic issues, as it does to all interested external parties.

Communications Committee – COMC

In the committee restructuring, there was a small shift in the COMC Working Groups and Task Forces, with the Working Group on Stakeholder Management moving to the STC.

Apart from this small change, however, the COMC mission remained the same; to define and implement the EASE communication strategy in terms of content, media and target audience. This work is often connected to the output of the other two committees, leveraging their work through professional and effective communication; fine-tuning messages, launching documents and spreading the word on relevant topics.

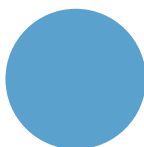
Two groups of tasks are more intimately connected to the COMC, ensuring the presence of Energy Storage in eyes and minds of man; i.e. the organisation and attendance of events and the presence of EASE both online and in writing. The former is taken care of by the [Events Work-](#)

[ing Group](#), which takes care of both the organisation of EASE events, such as the Annual Reception, and of the attendance to external events. The latter is the domain of the [External Communications Working Group](#), which presides over the EASE website (www.ease-storage.eu) and all EASE publications.

At the end of 2013, the [Programme Committee](#) was created, to provide input and assistance with the organisation of the first Energy Storage Global Conference, that will take place in November 2014 in Paris

Of course, as no topic is truly isolated and as all topics require the input or output of several Task Forces, Working Groups and Committees, all EASE bodies cooperate on a regular basis, ensuring the most inclusive approach and accurate results.

Similarly, as all topics – their interplay and importance – are prone to change, all Working Groups and Task Forces can be reorganised in order to better deal with new situations.





Joint EASE/EERA recommendations for a European Energy Storage Technology Development Roadmap towards 2030

EASE and EERA developed recommendations aimed at identifying critical Energy Storage technology gaps and at providing milestones for technology development. The need for a coordinated approach in research activities, thus leveraging and optimising RD&D investments, is an important aspect considered in the publication.

The technologies selected for the Roadmap are those that EASE and EERA judge to have the most promising potential for development to market-based deployment in a time horizon of 10-20 years. Emphasis has been placed on the present industrial maturity and the potential market status for the technologies after appropriate development.

The main document is accompanied by an annexe which contains more detailed technology descriptions and a brief overview of other Energy Storage Roadmaps around the world.



Energy Storage Database

During our 2nd Annual Reception, our online Energy Storage Database was launched. Its aim is to give visibility to the existing storage projects - both demonstration and commercial. It shows all types of Energy Storage projects all over Europe, with more information regarding commissioning dates, involved companies and budget, amongst others. It has been modelled to be completely compatible with other (non-European) databases, so as to maximise the potential and usefulness of such a tool. Like the Frequently Asked Questions and the Glossary, this is a living document, constantly being updated and improved, based upon the input the secretariat gets.



Frequently Asked Questions

The FAQ is an online tool aimed at those people with an interest - passing or passionate - in Energy Storage. The questions deal with the Economic, Technical, Environmental and Political and Regulatory dimensions of Storage. Like the Glossary, this is a living tool, with questions - and answers - being added whenever they become relevant.



Glossary

This document - both online and in PDF format - should be a great help to anyone who needs to know anything about anything to do with Energy Storage, whether you want to know more about the European Industrial Initiatives, or whether you are confused about what a High Voltage Line actually is. As this is a living - organic - document, we will keep adding terms as we encounter them.

Media

Throughout its existence, EASE has caught the attention of the media.

The article "Unlocking the value of Energy Storage" was taken up by several magazines and translated into French and German. Amongst others, it appeared in the following publications:

- imagazin.at - May
- Oekonews - May
- International Solar - June
- efficientenergy.net - June
- Petroleum Review - August
- Flux Revue des Suplélec - September



In addition to this, there have been several interviews, both in writing and video. The latest example is the appearance of an editorial of the Secretary-General in the quarterly magazine of SETIS.

Website

All of these tools and deliverables can be found on the EASE website, where we bring together all the information anyone could need to understand Energy Storage.

www.ease-storage.eu





Energy Storage Systems
Kolibri



Electrolyser
Siemens

**Quotes from
EASE Members**

"Innovation is Europe's key to the future. This is particularly true for Energy Storage. The European Industry needs performing, affordable and environmentally friendly [...] Energy Storage systems to set up the electrical system of the future. Innovation is the only way to broaden the technology palette available today while at the same time contributing to the competitiveness of the local European industry."



Inverter
GE Energy Storage

P2G - Falkenhagen
E.ON



**Quotes from
EASE Members**

"Energy Storage should be treated as an own component in the energy system independent from generation, transportation and consumption"





EASE/EERA Roadmap

The Joint EASE/EERA recommendations for a European Energy Storage Technology Development Roadmap towards 2030 was officially launched



New Member
Terna, the Italian Transmission System Operator, joined EASE



ENTSO-E CBA Methodology
EASE contributes to the ENTSO-E Cost-Benefit Analysis methodology for Energy Storage

January 2013

February 2013

March 2013

April 2013

May 2013

June 2013



EASE Policy Breakfast
on DG Energy's Working Paper: 'The future role and challenges of Energy Storage'



EU Sustainable Energy Week
EASE organised together with Eurelectric & the StoRE Project a High-Level Policy Conference on 'Facilitating Energy Storage to allow fast growth of sustainable energy'





European Commission Public Consultation

EASE responds to the public consultation on a 2030 Framework for Climate and Energy Policies

EASE Policy Breakfast
on DG Energy's Green Paper: 'A 2030 Framework for Climate and Energy Policies'



2nd Annual Reception
EASE organises its 2nd annual reception.

Glossary
EASE publishes its Energy Storage Glossary on the website

NER300
EASE presented Energy Storage at the European Parliament's Public Hearing on NER300

Position Paper
EASE commented on the Network Code on Load-Frequency Control and Reserves

July 2013

August 2013

September 2013

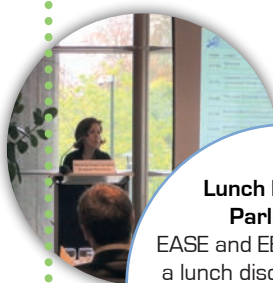
October 2013

November 2013

December 2013

ENTSO-E Public Consultation
EASE responds to the ENTSO-E Public Consultation on the Network Code Electricity Balancing

FAQs
EASE publishes its Frequently Asked Questions with regards to Energy Storage on the website

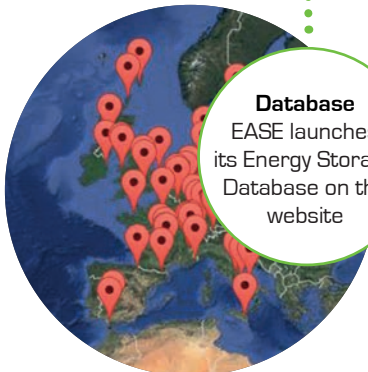


Lunch European Parliament
EASE and EERA organised a lunch discussion on the Roadmap, hosted by the Member of the European Parliament Maria da Graça Carvalho

New Member
BASF joined EASE



National Associations meeting
EASE organised the first coordination meeting with the different national associations in Europe



Database
EASE launches its Energy Storage Database on the website



In 2013, the association both organised its own share of events, and participated in those organised by others. A quick glance at the highpoints of the year.

EASE Organises

Policy Breakfast

Brussels, 14 March

EASE organised a policy breakfast on the DG Energy Working Paper "The future and challenges of Energy Storage". Mr Jean-Marie Bemtgen, Policy Officer at DG Energy of the European Commission, presented the Working Paper. The event was attended by 25 participants and resulted in an interesting Q&A session.

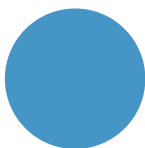


Roadmap- launch

Brussels, 17 April

The European Energy Storage Technology Roadmap towards 2030, jointly published by EASE and EERA, was officially launched in the Baden-Württemberg Representation in Brussels. After Mr Wiktor Raldow from DG Research & Innovation opened the event, the roadmap was presented by both EASE and EERA. A panel discussion, which included Ms Andreea Strachinescu from DG Energy and Mr Henrik Dam from DG Research & Innovation, followed.

The event was attended by around 100 participants, amongst which many EU-officials.



EU Sustainable Energy Week

Brussels, 24-27 June

EASE organised a High Level Policy Conference on 'Facilitating Energy Storage to allow fast growth of sustainable energy' together with Eurelectric & the stoRE Project. Over a hundred people participated.



Policy Breakfast

Brussels, 3 July

EASE organised a policy breakfast on the DG Energy Green Paper "A 2030 Framework for Climate and Energy Policies". Ms Mechthild Wördsdörfer, Head of Unit at the European Commission's DG Energy, explained the paper, some preliminary results of the public consultation and the next steps. The event had 24 participants.

Lunch in the European Parliament

Brussels, 12 November

A lunch discussion on the EASE/EERA Roadmap 2030 was organised by EERA and EASE in the European Parliament. The event was chaired by the MEP Maria da Graça Carvalho and sponsored by DTU. The speakers were Hans Hvidtfeldt Larsen from DTU, Prof Hans-Jürgen Seifert from KIT and EERA, Patrick Clerens from EASE, Keith McGrane from Gaelectric and Norela Constantinescu and Jean-Marie Bemtgen from DG Energy.



2nd Annual Reception

Brussels, 3 December

The European Commissioner for Energy, Mr Oettinger, and the Head of the Energy Systems Evaluation Unit of the Joint Research Centre of the European Commission, Mr Peteves, attended the event and gave a speech. The Energy Storage database was launched. There was a total of 130 participants.





EASE Participates

InnoGrid2020+

Brussels, 20-21 February

EASE discussed the work being done on the EASE/EERA Roadmap and participated to a panel discussion on Energy Storage and its cost and demand.



ESN/IMechE Conference

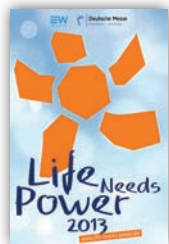
London, 12 March

EASE gave a presentation on "European Initiatives from Industry and Governments to encourage and support Electricity Storage".

Hannover Messe

Hannover, 9-11 April

"Life needs Power". EASE chaired a panel discussion titled "Energy Storage technologies - which solutions are future proof?"



SET Plan Conference

Dublin, 7-8 May

EASE attended the 6th Strategic Energy Technology Plan Conference, hosted by the Irish presidency.

Power-Gen Europe

Vienna, 4-6 June

EASE chaired a session on Energy Storage Alternatives.

Grid Scale Energy Storage Conference

Brussels, 1-2 July

EASE presented EASE and its activities during the opening session "Regulatory and Policy Developments".



European Utility Week

Amsterdam, 15-17 October

Mr Delpuch gave a speech on the topic "Energy Storage, why do we need it?". Mr Roettgen participated in a panel discussion on the integration of Renewable Energy Sources and on the value of storage.

Colloque 2013

Paris, 17 October

This year's colloque was focused on the introduction of renewable energy in the electricity system. Mr Delpuch gave a presentation.



EASE will Organise

Global Energy Storage Conference

Paris, 19-21 November 2014

EASE is organising its first global Conference together with ESA (the US Energy Storage Association) in the Cercle National des Armées in Paris.

The conference will last three days, with each day focusing on a fundamental part of the Energy Storage discussion. Next to the plenary sessions, there will also be an exhibition area.



Day 1 will focus on Technology and Research and will be organised with the assistance of the Joint Research Centre of the European Commission and of Sandia National Laboratories.

Day 2 will focus on the Market and Business Cases and will be organised by the European & American Energy Storage associations.



Energy Storage Global Conference

Explaining | Exchanging | Enabling

Day 3 will focus on Policy and will be organised with the assistance of DG Energy of the European Commission and of the Department of Energy of the USA.

To ensure the lasting impact of the conference, a declaration of intent will be signed at the end of the 3rd day. This will send a strong signal to both the private and the public sector about the relevance/necessity of Energy Storage and the increasingly important role it will play in the future.





Two of the main objectives of EASE are to

- be the voice of the Energy Storage community, actively promoting the use of Energy Storage in Europe and worldwide.
- build a European platform for sharing and disseminating Energy Storage-related information.

To do this, EASE is continuously striving to maintain its existing partnerships and build new ones.

Coordination with the European National Energy Storage Associations

In October 2013, EASE embarked upon a long and fruitful cooperation with the different national Energy Storage Associations from all over Europe.

The first meeting attracted representatives from BDEW (Germany), BVES (Germany), ESN (UK) and Anie-Energia (Italy).

It was agreed upon to have 2 informal meetings per year to update each other on the relevant policy developments and to possibly coordinate a response. This way, duplicate efforts can be avoided, while learning from the specific expertise and issues of the other organisations.

It also allows the different associations to see where their efforts would make the most sense, and where it would be better to band together with the others to achieve better results for Energy Storage.

The next meeting will be held in May 2014 and several national associations from, amongst others France and Portugal, have shown interest in joining this little get-together.



Energy Materials Industrial Research Initiative (EMIRI).

For more information on the ties and partnerships of EASE, check the following page which includes more of our national and European partnerships.

Member Visits

In order to better understand Energy Storage and its different technologies, the EASE secretariat always welcomes the opportunity to organise visits to its members' projects and to promote what they are doing in the field of Energy Storage.

In 2013, there have been visits to:

- TDK
Malaga, Spain
- E.ON
Falkenhagen, Germany
- Alstom Hydro
Grenoble, France
- Hydrogenics
Oevel, Belgium

Cooperation & MoUs

EASE has been tightening the bonds with its American counterpart, the Energy Storage Association. After signing a Memorandum of Understanding (MoU) with the association, plans are underway to organise a Global Energy Storage Conference.

Furthermore, EASE has been talking to other European players in the Energy Storage field, amongst others the University of Birmingham (member of the Centre of Low Carbon Futures) and the Joint Research Centre of the European Commission.

The association has also been cooperating with the European Electricity Grid Initiative (EEGI), which was involved in the mapping of Energy Storage in Europe, and with the



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